

GILA RIVER BASIN

0948460 PANTANO WASH NEAR VAIL, AZ

LOCATION--Lat 32°02'09", long 110°40'37", in SW_{1/4}SE_{1/4} sec. 14, T.16 S., R.16 E., Pima County, Hydrologic Unit 15050302, on right bank 60 ft upstream from dam, 2.2 mi southeast of Vail, and 20 mi southeast of Tucson City Hall.

DRAINAGE AREA--457 mi².

PERIOD OF RECORD--Jan. 1959 to Sept. 1974, water years 1975–89 (annual maximums only), Oct. 1989 to current year.

GAGE--Water-stage recorder and concrete weir. Elevation of gage is 3,205 ft above sea level, from topographic map. Jan. 1959 to Sept. 1974 (water-stage recorder) and Oct. 1974 to Sept. 1989 (crest-stage gage) at same site and datum.

REMARKS--Records fair, except for estimated daily discharges, which are poor. No known diversion above station. Records published herein represent flow by gage. Infiltration flow is not included. Base runoff past gage station consists of downvalley underflow that is brought to the surface by the concrete dam 60 ft downstream, which extends to bedrock.

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 12,000 ft³/s Oct. 1 or 2, 1983, gage height, 15.25 ft, from inside highwater mark, from rating curve extended above 2,000 ft³/s on basis of slope-area measurements at gage heights 10.9 and 24 ft; no flow June 26 to July 13, Aug. 7, 1971 (result of work on infiltration gallery), June 27 to July 13, 1973 (result of ponding during construction work on dam), May 28 to June 12, and July 12, 13, 17, and 18, 1974.

EXTREMES OUTSIDE PERIOD OF RECORD--Maximum discharge since at least 1930, about 38,000 ft³/s, Aug. 11, 1958, gage height, about 24 ft, from floodmark, from slope-area measurement.

EXTREMES FOR CURRENT YEAR--Peak discharges greater than base discharge of 2,000 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Aug. 5.....	2045	*4,560	*10.92

Minimum daily discharge, 0.05 ft³/s, Dec. 5, 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.59	0.43	0.08	0.20	0.38	0.78	0.22	4.0	1.2	0.57	1.3	0.94
2	0.60	0.40	0.06	0.20	0.35	0.79	0.44	4.2	1.1	0.56	0.75	1.0
3	0.62	0.36	0.06	0.20	0.35	0.76	0.20	3.8	1.0	0.54	3.2	0.94
4	0.63	0.35	0.06	0.20	0.31	0.78	0.20	3.1	0.94	0.50	2.0	0.88
5	0.63	0.35	0.05	0.21	0.30	0.66	0.18	3.0	0.92	0.45	272	0.78
6	0.63	0.32	0.06	0.21	0.29	0.65	0.15	3.3	0.80	0.45	e15	0.73
7	0.68	0.28	0.05	0.20	0.29	0.75	0.14	3.8	0.80	0.45	e1.7	0.62
8	0.68	0.28	2.9	0.23	0.30	0.78	0.14	3.9	0.75	0.48	e1.5	0.56
9	9.2	0.26	0.14	0.23	0.29	0.80	0.14	3.9	0.75	0.56	e0.84	0.45
10	40	0.23	0.13	0.24	0.30	0.76	0.18	3.6	0.71	0.54	0.49	0.43
11	0.62	0.20	0.13	0.25	0.33	0.76	0.20	3.4	0.63	0.47	0.53	0.43
12	0.62	0.27	0.14	0.26	0.30	0.75	0.16	3.4	0.61	0.42	0.58	0.44
13	0.62	0.30	0.16	0.33	0.34	0.75	0.15	3.3	0.63	0.52	0.62	0.44
14	0.62	0.25	0.16	0.35	0.38	0.77	0.15	3.0	0.60	0.63	0.68	0.43
15	0.62	0.25	0.16	0.35	0.42	0.74	0.15	2.6	0.59	0.59	0.76	0.41
16	0.63	0.22	0.17	0.36	0.47	0.74	0.15	2.6	0.64	0.53	76	0.37
17	0.58	0.20	0.18	0.37	0.47	0.72	0.17	2.3	0.63	13	e0.80	0.37
18	0.55	0.20	0.19	0.34	0.54	0.67	0.24	2.3	0.63	1.6	3.0	3.4
19	0.55	0.16	0.14	0.35	0.59	0.59	0.31	2.1	0.62	1.4	29	0.67
20	0.55	0.16	0.15	0.35	0.60	0.52	0.40	2.0	0.62	1.2	e1.5	0.61
21	0.51	0.14	0.16	0.35	0.66	0.49	0.50	1.9	0.67	1.0	e1.0	0.57
22	0.48	0.12	0.16	0.38	0.68	0.45	0.50	1.8	0.79	0.91	e0.70	0.49
23	0.49	0.13	0.18	0.44	0.74	0.40	0.73	1.8	0.82	0.99	0.57	0.45
24	0.50	0.11	0.20	0.47	0.77	0.36	1.00	1.7	0.84	1.1	1.0	0.44
25	0.47	0.10	0.20	0.47	0.73	0.38	1.2	1.8	0.81	0.99	0.82	0.44
26	0.45	0.10	0.20	0.47	0.72	0.43	1.4	1.7	0.76	0.91	0.86	0.45
27	0.46	0.08	0.21	0.46	0.74	0.49	1.5	1.6	0.76	73	0.88	0.45
28	0.47	0.10	0.22	0.45	0.73	0.54	2.1	1.4	0.72	200	0.83	0.39
29	0.44	0.09	0.24	0.46	0.77	0.59	2.5	1.3	0.65	14	0.87	0.38
30	0.41	0.08	0.25	0.40	---	0.60	3.7	1.3	0.64	6.5	0.92	0.38
31	0.42	---	0.25	0.40	---	18	---	1.2	---	2.8	0.96	---
TOTAL	65.32	6.52	7.44	10.18	14.14	37.25	19.20	81.1	22.63	327.66	421.66	19.34
MEAN	2.11	0.22	0.24	0.33	0.49	1.20	0.64	2.62	0.75	10.6	13.6	0.64
MAX	40	0.43	2.9	0.47	0.77	18	3.7	4.2	1.2	200	272	3.4
MIN	0.41	0.08	0.05	0.20	0.29	0.36	0.14	1.2	0.59	0.42	0.49	0.37
AC-FT	130	13	15	20	28	74	38	161	45	650	836	38
CFSM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.03	0.00
IN.	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.03	0.03	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2004, BY WATER YEAR (WY)

(WY)	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
MEAN	3.10	2.33	5.10	6.41	6.14	3.45	2.16	1.18	1.69	12.9	18.5	9.31
MAX	45.6	38.7	50.3	111	75.1	21.2	12.0	2.62	20.8	49.6	92.6	105
MIN	0.10	0.10	0.10	0.09	0.10	0.12	0.32	0.19	0.07	0.22	0.52	0.16
(WY)	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1960 - 2004

ANNUAL TOTAL	881.21	1032.44										
ANNUAL MEAN	2.41	2.82										
HIGHEST ANNUAL MEAN												
LOWEST ANNUAL MEAN												
HIGHEST DAILY MEAN	119	Jul 29	272	Aug 5	2230	Sep 10	1964					
LOWEST DAILY MEAN	0.04	Jun 5	0.05	Dec 5	0.00	Jun 26	1971					
ANNUAL SEVEN-DAY MINIMUM	0.05	Jun 5	0.06	Dec 1	0.00	Jun 26	1971					
ANNUAL RUNOFF (AC-FT)	1750		2050		4380							
ANNUAL RUNOFF (CFSM)	0.005		0.006		0.013							
ANNUAL RUNOFF (INCHES)	0.07		0.08		0.18							
10 PERCENT EXCEEDS	0.65		2.3		4.3							
50 PERCENT EXCEEDS	0.38		0.55		1.2							
90 PERCENT EXCEEDS	0.08		0.16		0.30							

e Estimated